

PTO/SB/21 (05-03)

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number	10/743,884
Filing Date	December 22, 2003
First Named Inventor	Yizhong Gu
Art Unit	1645
Examiner Name	Not yet assigned
Attorney Docket Number	01492.US1

**ENCLOSURES (Check all that apply)**

- |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <input checked="" type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment/Reply<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation<br>Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) _____ | <input type="checkbox"/> After Allowance communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input type="checkbox"/> Other Enclosure(s) (please identify below): |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Remarks

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Pharmacia & Upjohn Company Edward F. Rehberg 34,703
Signature	<i>Edward F. Rehberg</i>
Date	6-3-04

**CERTIFICATE OF TRANSMISSION/MAILING**

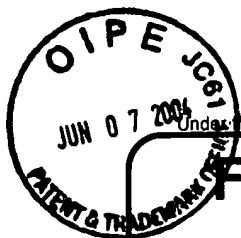
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# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)**180.00**

## Complete if Known

Application Number	10/743,884
Filing Date	December 22, 2003
First Named Inventor	Yizhong Gu
Examiner Name	Not yet assigned
Art Unit	1645
Attorney Docket No.	01492.US1

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit  
Account  
Number  
Deposit  
Account  
Name

21-0718

Pharmacia & Upjohn Company

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☐ Charge any additional fee(s) or any underpayment of fee(s)

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## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)**0.00**

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

		Extra Claims		Fee from below		Fee Paid
Total Claims		-20** =	0	X	\$0.00	
Independent Claims		-3** =	0	X	\$0.00	
Multiple Dependent					\$0.00	

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**0.00**

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
1051	130	2051	65	Surcharge - late filing fee or oath
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet
1053	130	1053	130	Non-English specification
1812	2,520	1812	2,520	For filing a request for ex parte reexamination
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action
1251	110	2251	55	Extension for reply within first month
1252	420	2252	210	Extension for reply within second month
1253	950	2253	475	Extension for reply within third month
1254	1,480	2254	740	Extension for reply within fourth month
1255	2,010	2255	1,005	Extension for reply within fifth month
1401	330	2401	165	Notice of Appeal
1402	330	2402	165	Filing a brief in support of an appeal
1403	290	2403	145	Request for oral hearing
1451	1,510	1451	1,510	Petition to institute a public use proceeding
1452	110	2452	55	Petition to revive - unavoidable
1453	1,330	2453	665	Petition to revive - unintentional
1501	1,330	2501	665	Utility issue fee (or reissue)
1502	480	2502	240	Design issue fee
1503	640	2503	320	Plant issue fee
1460	130	1460	130	Petitions to the Commissioner
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)
1806	180	1806	180	Submission of Information Disclosure Stmt
8021	40	8021	40	Recording each patent assignment per property (times number of properties)
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))
1801	770	2801	385	Request for Continued Examination (RCE)
1802	900	1802	900	Request for expedited examination of a design application

Fee Paid

180.00

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$)**180.00**

## SUBMITTED BY

Name (Print/Type) **Edward F. Rehberg**

Registration No. **34,703**  
(Attorney/Agent)

(Complete (if applicable))

Telephone **(269) 833-7829**

Signature

Date

**6-03-04**

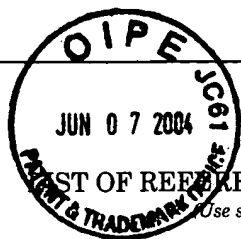
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06/08/2004 LWONDIN1 00000044 210718 10743884

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<b>LIST OF REFERENCES CITED BY APPLICANT</b> (Use several sheets if necessary)	Atty. Docket No. 01492.US1		Serial No. 10/743,884
	Applicant      Yizhong Gu		
	Filing Date 2003	December 22,	Group    1645

**U.S. PATENT DOCUMENTS**

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	AA	4,366,241	Dec. 28, 1982	Tom, et. al.	435	7	
	AB	4,376,110	March 8, 1983	David, et. al.	436	513	
	AC	4,517,288	May 14, 1985	Giegel, et. al.	435	7	
	AD	4,837,168	June 6, 1989	De Jaeger, et. al.	436	533	
	AE	5,118,937	June 2, 1992	Hillenkamp et. al.	250	282	
	AF	5,514,545	May 7, 1996	Rosenstein	436	514	
	AG	5,591,645	Jan. 7, 1997	Eberwine	435	6	
	AH	5,622,871	Apr. 22, 1997	May, et. al.	436	514	
	AI	5,719,060	Feb. 17, 1998	Hutchens, et. al.	436	174	

**FOREIGN PATENT DOCUMENTS**

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AJ	WO 91/09955	July 11, 1991	WIPO	C12N	15/67	X	
	AK	WO 91/18982	Dec 12, 1991	WIPO	C12N	15/12	X	
	AL	WO 92/20808	Nov. 26, 1992	WIPO	C12N	15/85	X	
	AM	WO 93/11236	June 10, 1993	WIPO	C12N	15/13	X	
	AN	WO 94/12650	June 9, 1994	WIPO	C12N	15/90	X	
	AO	WO 95/35505	Dec. 28, 1995	WIPO	G01N	33/543	X	
	AP	WO 97/09433	Mar. 13, 1997	WIPO	C12N	15/54	X	
	AQ	EP A 0367566	May 14, 1997	Europe	C12N	15/12	X	

**OTHER PRIOR ART** (Including Author, Title, Date, Pertinent Pages, Etc.)

	AR	Smith, T.F., and M.S. Waterman, "'Comparison OF Biosequences," in <u>Advances in Applied Mathematics</u> 2, pp. 482-489, 1981.
	AS	Asai, ed. <u>Methods in Cell Biology</u> Volume 37, Chapters 6, 7, & 8; <u>Antibodies in Cell Biology</u> , Academic Press, Inc. New York (1993)
	AT	Aujame et al., <u>Human Antibodies</u> , 8(4):155-168 (1997);
	AU	Ausubel et al., eds., <u>Current Protocols in Molecular Biology</u> , Section 10.11.8, John Wiley & Sons, New York 1993

<b>LIST OF REFERENCES CITED BY APPLICANT</b> <i>(Use several sheets if necessary)</i>		<b>Atty. Docket No.</b> 01492.US1	<b>Serial No.</b> 10/743,884
		<b>Applicant</b> Yizhong Gu	
		<b>Filing Date</b> 2003	<b>December 22,</b> <b>Group</b> 1645
	AV	Ausubel et al., eds., Current Protocols in Molecular Biology, Chapter 11, John Wiley & Sons, New York 1993	
	AW	Ausubel, et.al. (Eds.), Protocols in Molecular Biology, John Wiley & Sons (1994), pp. 6.0.3 to 6.4.10.	
	AX	Bolton and Hunter, Biochem. J. 133, 529 (1973)	
	AY	Bruggemann and Neuberger, Immunol. Today, 17(8):391-97 (1996)	
	AZ	Bruggemann and Taussig, Curr. Opin. Biotechnol., 8:455-58 (1997)	
	BA	Capecchi, Science 244:1288-1292 (1989)	
	BB	Choo et al., (1997) J Mol Biol 273:525-32	
	BC	Cole et al., pg. 77-96 in Monoclonal Antibodies and Cancer Therapy, Alan R. Liss, Inc. (1985)	
	BD	Cosman <i>et al.</i> (Nature 312:768 (1984)	
	BE	Cosman <i>et al.</i> (Mol. Immunol. 23:935 (1986)	
	BF	Dayhoff, in Atlas of Protein Sequence and Structure, Vol. 5, p. 124, National Biochemical Research Foundation, Washington, D.C. (1972)	
	BG	Evan et al., Molecular and Cellular Biology, 5:3610-3616 (1985)	
	BH	Field et al., Mol. Cell. Biol., 8:2159-2165 (1988)	
	BI	Gluzman <i>et al.</i> , Cell 23:175 (1981)	
	BJ	Greisman and Pabo (1997) Science 275:657-61	
	BK	Harlow et al. (Eds), Antibodies A Laboratory Manual; Cold Spring Harbor Laboratory; Cold Spring Harbor, NY (1988), Chapter 6 and 14	
	BM	Hoefer, G., et. al., cDNA cloning of the human peroxisomal enoyl-CoA hydratase:3-hydroxyacyl-CoA dehydrogenase bifunctional enzyme and localization to chromosome 3q26.3-3q28: a free left Alu arm is inserted in the 3-prime noncoding region. <i>Genomics</i> 19: 60-67, 1994.	
	BN	Hoogenboom, TIBTECH, 15:62-70, 1997.	
	BO	Hopp, et. al., BioTechnology, 6:1204-1210, 1988.	
	BP	Hopp and Woods, Mol. Immunol, 1983, 20(4): p. 483-489	
	BQ	Hopp and Woods, Proc. Natl. Acad. Sci. USA 1981, 78(6) p. 3824-3828	
	BR	Innis, M.A., PCR Protocols: A Guide to Methods and Applications, David H. Gelfand, John J. Sninsky, and Thomas J. White, eds., Academic Press, Inc., New York, 1990.	
	BS	Kim et al., (1997) Proc Natl Acad Sci USA 94:3616-3620	
	BT	Kohler, G. and Milstein, C., Nature 256: 495-497 (1975)	
	BU	Kozbor et al., Immunology Today 4: 72 (1983)	
	BV	Lehninger, [Biochemistry, Second Edition; Worth Publishers, Inc. NY:NY (1975), pp.71-77	

<b>LIST OF REFERENCES CITED BY APPLICANT</b> <i>(Use several sheets if necessary)</i>		<b>Atty. Docket No.</b> 01492.US1	<b>Serial No.</b> 10/743,884
		<b>Applicant</b> Yizhong Gu	
		<b>Filing Date</b> December 22, 2003	<b>Group</b> 1645
	BW	Liu et al., (1997) Proc Natl Acad Sci USA 94:5525-30	
	BX	Luckow and Summers, <i>Bio/Technology</i> 6:47 (1988)	
	BY	Lutz-Freyermuth et al., Proc. Natl. Acad. Sci. USA, 87:6393-6397(1990)	
	BZ	Maddox et al., 1983, J. Exp. Med., 158:1211	
	CA	Margalit, H. et al., J. Immunol. 1987 138(7): pg 2213-29	
	CB	Martin et al., Science, 255:192-194 (1992)	
	CC	McColl et al., (1999) Proc Natl Acad Sci USA 96:9521-6	
	CD	Morrison, Methods in Enzymology 32b, 103 (1974)	
	CE	Okayama and Berg ( <i>Mol. Cell. Biol.</i> 3:280 (1983));	
	CF	Paborsky et al., Protein Engineering, 3(6):547-553 1990	
	CG	Qi, C., et. al., Absence of spontaneous peroxisome proliferation in enoyl-CoA hydratase/L-3-hydroxyacyl-CoA dehydrogenase-deficient mouse liver: further support for the role of fatty acyl CoA oxidase in PPAR-alpha ligand metabolism. <i>J. Biol. Chem.</i> 274: 15775-15780, 1999	
	CH	Rader et al., Curr. Opin. Biotechnol., 8:503-508 (1997)	
	CI	Rattan et al., "Protein Synthesis: Post-translational Modifications and Aging", Ann NY Acad Sci (1992) 663:4842	
	CJ	Sambrook, et al., (Eds.), Molecular Cloning: A Laboratory Manual, Cold Spring Harbor Laboratory Press: Cold Spring Harbor, New York (1989), pp. 9.47 to 9.51.	
	CK	Segal et al., (1999) Proc Natl Acad Sci USA 96:2758-2763	
	CL	Seifter et al., "Analysis for protein modifications and nonprotein cofactors", Meth Enzymol (1990) 182:626-646	
	CM	Skinner et al., J. Biol. Chem., 266:14163-14166 (1991)	
	CN	Stites & Terr, eds. Basic and Clinical Immunology 7th Edition, Chapter 18, (1991)	
		Syvanen et al., J. Biol. Chem. 284, 3762 (1973)	
	CO	Tijssen, P. (1993) Laboratory Techniques in Biochemistry and Molecular Biology: Hybridization With Nucleic Acid Probes, Part I. Theory and Nucleic Acid Preparation, Chapter 3, Elsevier, New York, N.Y	
	CP	Wanders, R. J. A., et. al., A bifunctional protein with deficient enzymic activity: identification of a new peroxisomal disorder using novel methods to measure the peroxisomal beta-oxidation enzyme activities. <i>J. Inherit. Metab. Dis.</i> 13: 375-379, 1990.	
	CQ	Watkins, P. A., et. al., Peroxisomal bifunctional enzyme deficiency. <i>J. Clin. Invest.</i> 83: 771-777, 1989.	
	CR	Wold, F., Post-translational Protein Modifications: Perspectives and Prospects, pgs. 1-12 in Postranslational Covalent Modification of Proteins, B. C. Johnson, Ed., Academic Press, New York, 1983	
	CS	Wu et al., (1995) Proc Natl Acad Sci USA 92:344-348	
Examiner		Date Considered	